

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services  
Div of Environmental Health, 11 SHS  
(207) 287-5672 Fax: (207) 287-3165

## PROPERTY LOCATION

>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

City, Town, or Plantation **LAMOINE**  
Street or Road **ROUTE 184**  
Subdivision, Lot #

## OWNER/APPLICANT INFORMATION

Name (last, first, MI) **MURPHY, RALPH** ☒ Owner ☐ Applicant  
Mailing Address of Owner/Applicant **P.O. Box 314**  
**SURRY, ME 04684**  
Daytime Tel. # **(207) 460-6102**

LAMOINE

Date Permit Issued: **8/30/11**

PERMIT # 1667 TOWN COPY

\$ **1115.9** ☐ Double Fee ☒ FEE Charged

L.P.I. # **1.01.11**

Local Plumbing Inspector Signature

## OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

Signature of Owner or Applicant

Date **8-30-11**

## CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.

(1st) date approved **8/31/11**

Local Plumbing Inspector Signature

(2nd) date approved **2/27/11**

## PERMIT INFORMATION

### TYPE OF APPLICATION

- ☐ 1. First Time System  
☒ 2. Replacement System  
Type replaced: **20'x40'**  
Year installed: **JUNE 2009**  
☐ 3. Expanded System  
a. ☐ <25% Expansion  
b. ☐ ≥25% Expansion  
☐ 4. Experimental System  
☐ 5. Seasonal Conversion

### THIS APPLICATION REQUIRES

- ☒ 1. No Rule Variance  
☐ 2. First Time System Variance  
a. Local Plumbing Inspector Approval  
b. State & Local Plumbing Inspector Approval  
☐ 3. Replacement System Variance  
a. Local Plumbing Inspector Approval  
b. State & Local Plumbing Inspector Approval  
☐ 4. Minimum Lot Size Variance  
☐ 5. Seasonal Conversion Permit

### DISPOSAL SYSTEM COMPONENTS

- ☐ 1. Complete Non-engineered System  
☐ 2. Primitive System (graywater & alt. toilet)  
☐ 3. Alternative Toilet, specify: \_\_\_\_\_  
☐ 4. Non-engineered Treatment Tank (only)  
☐ 5. Holding Tank, \_\_\_\_\_ gallons  
☒ 6. Non-engineered Disposal Field (only)  
☐ 7. Separated Laundry System  
☐ 8. Complete Engineered System (2000 gpd or more)  
☐ 9. Engineered Treatment Tank (only)  
☐ 10. Engineered Disposal Field (only)  
☐ 11. Pre-treatment, specify: \_\_\_\_\_  
☐ 12. Miscellaneous Components

### SIZE OF PROPERTY

**1.86 +/-** SQ. FT. **ACRES**

### DISPOSAL SYSTEM TO SERVE

- ☒ 1. Single Family Dwelling Unit, No. of Bedrooms: **3**  
☐ 2. Multiple Family Dwelling, No. of Units: \_\_\_\_\_  
☐ 3. Other: \_\_\_\_\_

### TYPE OF WATER SUPPLY

- ☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private  
☒ 4. Public ☐ 5. Other

### SHORELAND ZONING

☐ Yes ☒ No

Current Use ☐ Seasonal ☒ Year Round ☐ Undeveloped

## DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

### TREATMENT TANK

- ☒ 1. Concrete  
a. Regular  
b. Low Profile  
☐ 2. Plastic  
☐ 3. Other: \_\_\_\_\_  
CAPACITY: **1000** GAL.

### DISPOSAL FIELD TYPE & SIZE

- ☐ 1. Stone Bed ☐ 2. Stone Trench  
☐ 3. Proprietary Device  
a. cluster array c. Linear  
b. regular load d. H-20 load  
☒ 4. Other: **12" 600 Flow**  
SIZE: **160** sq. ft. ☒ lin. ft.

### GARBAGE DISPOSAL UNIT

- ☒ 1. No ☐ 2. Yes ☐ 3. Maybe  
If Yes or Maybe, specify one below:  
a. multi-compartment tank  
b. \_\_\_\_\_ tanks in series  
c. increase in tank capacity  
d. Fitter on Tank Outlet

### DESIGN FLOW

- 270** gallons per day  
BASED ON:  
☒ 1. Table 4A (dwelling unit(s))  
☐ 2. Table 4C (other facilities)  
SHOW CALCULATIONS for other facilities

### SOIL DATA & DESIGN CLASS PROFILE CONDITION

**4, C**  
at Observation Hole # **TPI**  
Depth **27"**  
of Most Limiting Soil Factor

### DISPOSAL FIELD SIZING

- ☒ 1. Medium---2.6 sq. ft. / gpd  
☐ 2. Medium---Large 3.3 sq. ft. / gpd  
☐ 3. Large---4.1 sq. ft. / gpd  
☐ 4. Extra Large---5.0 sq. ft. / gpd

### EFFLUENT/EJECTOR PUMP

- ☒ 1. Not Required  
☐ 2. May Be Required  
☐ 3. Required  
Specify only for engineered systems:  
DOSE: \_\_\_\_\_ gallons

☐ 3. Section 4G (meter readings)  
ATTACH WATER METER DATA

### LATITUDE AND LONGITUDE

at center of disposal area  
Lat. **44** d **28** m **41** N  
Lon. **68** d **20** m **17** W  
if g.p.s., state margin of error: **30'**

## SITE EVALUATOR STATEMENT

I certify that on **5/11/11** (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A-CMR 241).

Site Evaluator Signature

**STEPHEN H. HOWELL**  
Site Evaluator Name Printed

SE # **213**

Date **5/14/11**

Telephone Number **(207) 848-5714**

E-mail Address **J.W. GLE**  
**ENG. INC**

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services  
Division of Environmental Health  
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

LAMONNE

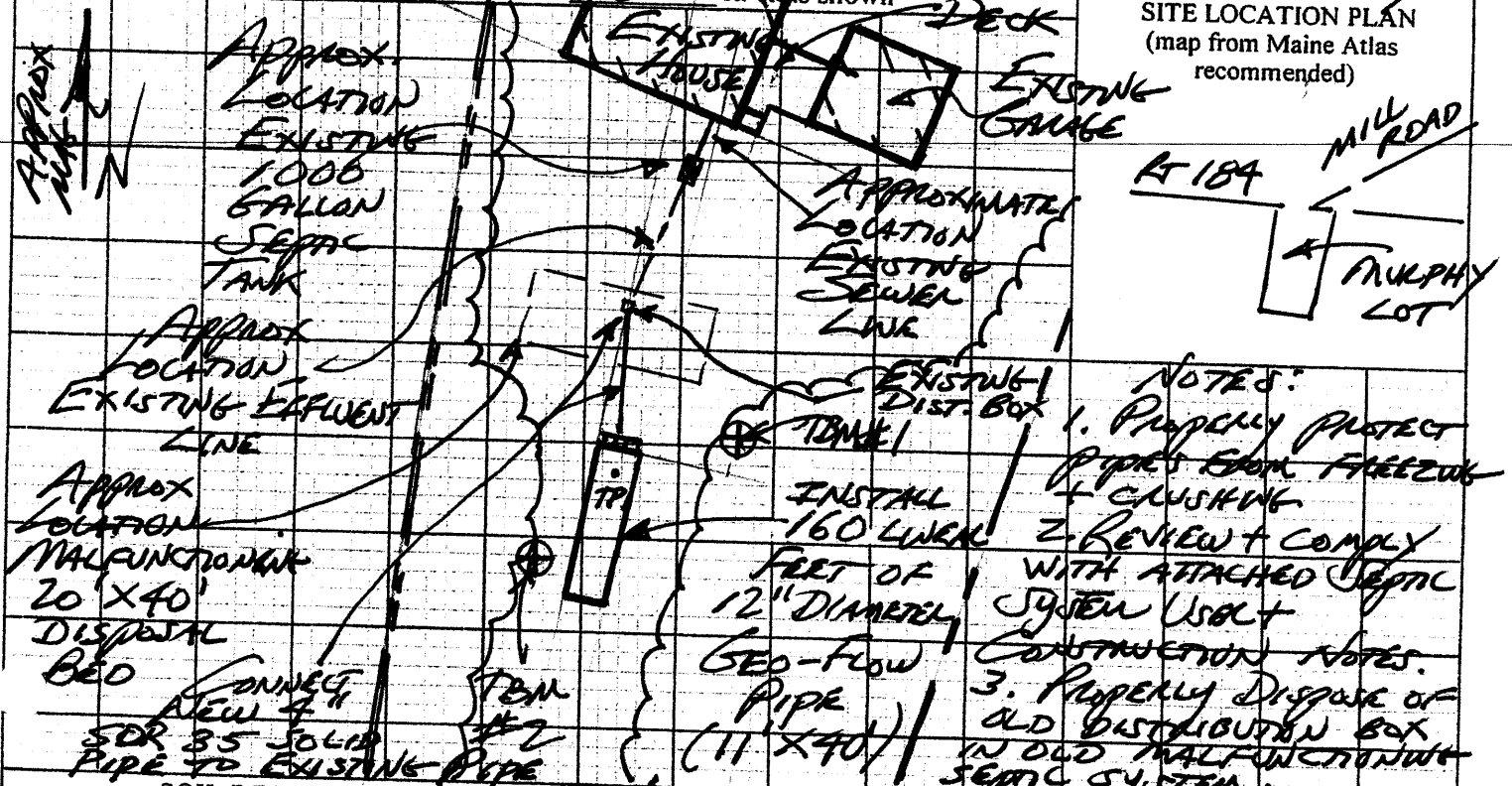
ROUTE 184  
DOUGLAS HIGHWAY

RALPH MURPHY

SITE PLAN

Scale 1" = 50 ft. as shown

SITE LOCATION PLAN  
(map from Maine Atlas recommended)



NOTES:  
1. PROPERLY PROTECT PIPES FROM FREEZING + CRACKING.  
2. REVIEW + COMPLY WITH ATTACHED SEPTIC SYSTEM USE + CONSTRUCTION NOTES.  
3. PROPERLY DISPOSE OF OLD DISTRIBUTION BOX IN OLD MALFUNCTIONING SEPTIC SYSTEM.

## SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TPI ☒ Test Pit ☐ Boring  
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
0			
10			
20			
30			
40			
50			

Soil Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Ground Water
4 C	1-3%	27	<input type="checkbox"/> Restrictive Layer
file Condition			<input type="checkbox"/> Bedrock
			<input type="checkbox"/> Pit Depth

Observation Hole        ☐ Test Pit ☐ Boring  
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
0			
10			
20			
30			
40			
50			

Soil Classification	Slope	Limiting Factor	<input type="checkbox"/> Ground Water
Profile Condition	%		<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
			<input type="checkbox"/> Pit Depth

Site Evaluator Signature

SE #

Date

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services  
Division of Environmental Health  
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

LAMBOWE

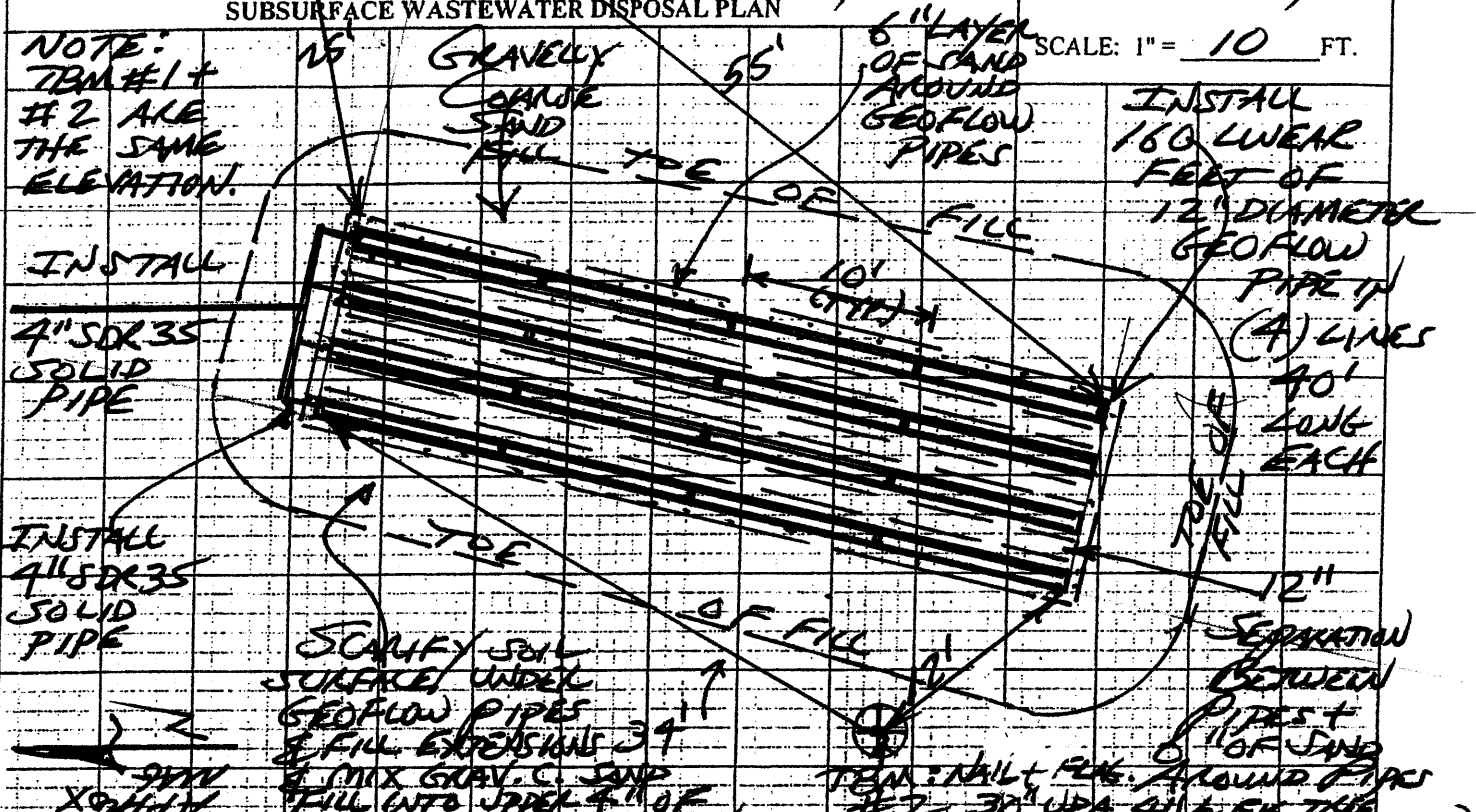
DOUGLAS HIGHWAY

RALPH MURPHY

## SUBSURFACE WASTEWATER DISPOSAL PLAN

NOTE:  
TRM #1 &  
#2 ARE  
THE SAME  
ELEVATION.

SCALE: 1" = 10 FT.



### FILL REQUIREMENTS

### CONSTRUCTION ELEVATIONS

### ELEVATION REFERENCE POINT (TRM #1)

Depth of Fill (Upslope) 24" 32"  
Top of Distribution Pipe or Proprietary Device  
Depth of Fill (Downslope) 24" 32"  
Bottom of Disposal Area

-11" Location & Description: NAIL + FLAG W. 6" UPA 6" DIA. W. BUSH  
-23" Reference Elevation: OIL TREE  
-41"

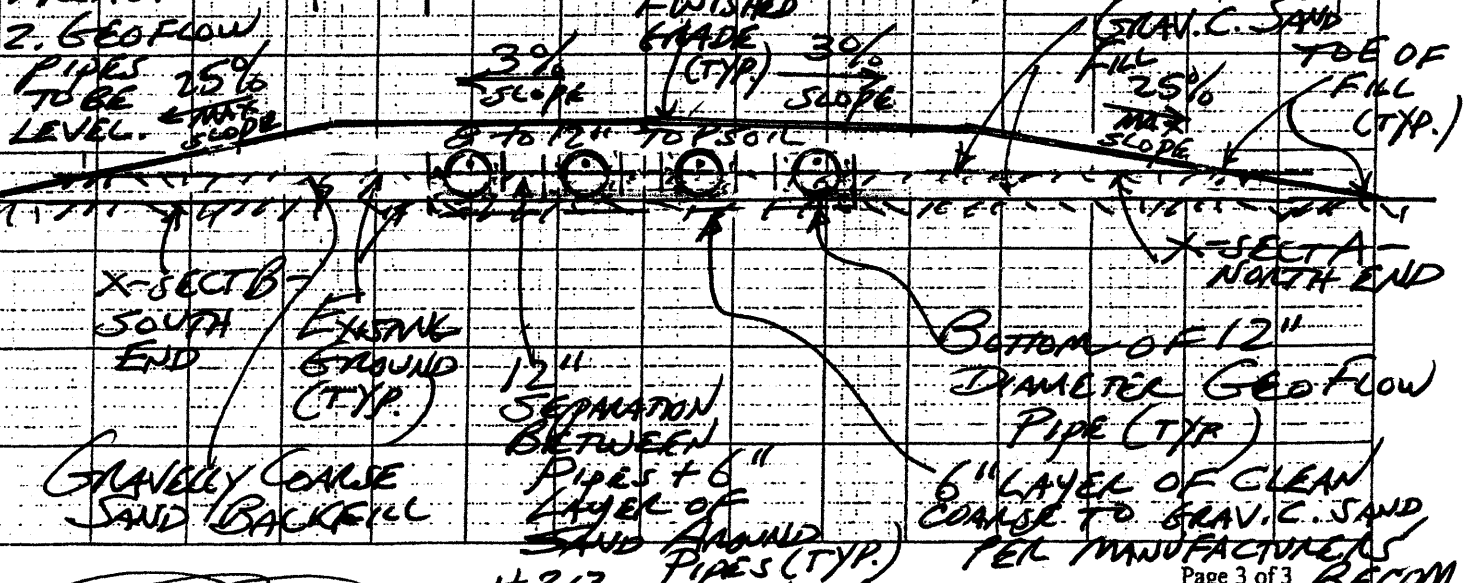
NOTES  
1. LINE FERTILIZER  
SEED & MULCH  
ALL DISTURBED  
AREAS.

### DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = 5 ft.

Vertical 1" = 5 ft.



Site Evaluator Signature

SE #

Date

## **Construction Notes**

1. GeoFlow pipes to be a minimum of 100 feet from all wells, 300 feet from public water supplies, 50 feet from a minor water body/course, 100 feet from a major water body/course, 15 feet from the edge of any curtain drains, 10 feet from property lines, and 20 feet from buildings.

---

2. Septic tank to be a minimum of 50 feet from wells, 100 feet from ponds, lakes, and a major water body/course, 50 feet from a minor water body/course, 10 feet from property lines, and 8 feet from buildings.
3. Divert all roof runoff and surface runoff away from leachfield.
4. Properly protect all pipes, GeoFlow pipes, and tanks from freezing and/or crushing.
5. Review and comply with attached Septic System User Notes.

2. **Bottom of disposal field:** The bottom of each disposal field must be installed at the elevation specified on the permit. It must be maintained to a level grade no greater than 2 inches within 100 feet. Note: The bottom of a disposal field serves as the final stage of the distribution network.
3. **Avoid unnecessary compaction:** Excavation must be carried out in a manner that will avoid unnecessary compaction of both sidewalls and bottom area. Heavy equipment, especially rubber-tired vehicles such as front-end loaders, should not be driven over the exposed bottom of the disposal field. Excavation should be carried out when possible, by a back-hoe operating from outside the perimeter of the previously excavated portions of the disposal fields.
4. **Reopen smeared or compacted bottom or sidewall surfaces:** If any portion of the bottom or sidewalls becomes smeared or compacted, that portion must be scarified to reopen soil pores. Roto-tilling may be necessary to reach the limit of compacted soil depth.
5. **Weather conditions:** Work should be scheduled so that excavated areas are not exposed to rainfall or wind-blown silt. Any loose soil or debris that is washed or otherwise deposited within the excavation must be carefully removed prior to backfilling. Additionally, disposal fields should not be installed in frozen ground or when the ambient air temperature is below freezing, especially if construction will take place over several days.

#### **D. CONSTRUCTION**

1. **Construction:** The installer of the system must make certain that the system and all its component parts are installed in conformance with the requirements of these Rules, the plan prepared by the site evaluator, and with any special engineering design requirements approved or required by the Department, pursuant to an approved variance.
2. **Soil and backfill material:** The installer of the system must make certain that the construction and installation are performed without adversely affecting the capacity of the soil or backfill material to adequately absorb or treat the septic tank effluent.

#### **E. BACKFILL PLACEMENT FOR DISPOSAL AREAS INCLUDING FILL EXTENSIONS**

1. **General:** Selection and placement of backfill must comply with the requirements of this Section.
2. **Backfill standards:** The backfill material must be gravelly coarse sand which meets the requirements of Table 11A or 11(E)(2)(a) below, as approved by the Department or LPI:

**TABLE 11A**  
**Backfill Textural Gradation**

<b>Sieve Size</b>	<b>Percent Passing by Weight</b>
3 inches	100
#4	75-100
#10	50-100
#60	10-50
#100	2-20
#200	2-8
Clay Fraction	0-2

- (a) **Field determination of backfill:** Due to the difficulty of obtaining sieve analyses and the variability of backfill material, the following procedures can be used in the field to determine the suitability of backfill material. The backfill is suitable if the soil texture is loose single grains, the individual sand grains can be readily seen (similar to salt or sugar grains) and felt, and the following conditions are observed: If squeezed in the hand when dry, it will fall apart when the pressure is released but has enough fines to stain the lines in the palm of the hand; or, if squeezed when moist, it will form a cast that will crumble when

## SEPTIC SYSTEM USER NOTES

1. This septic system has been designed to meet requirements of the State of Maine Subsurface Wastewater Disposal Rules, 10-144A CMR 241. Because site evaluators are not notified when local ordinances are enacted which exceed state requirements, it is the septic system owners responsibility to ensure that this septic system design (HHE-200 form) is in compliance with applicable local ordinances. This can be done by contacting your local plumbing inspector and asking about local ordinances which differ from those required in the Rules.

---

2. It is the septic system owner's responsibility to obtain any local, state, or federal permit(s) that may be required for the installation of this septic system (work within or adjacent to a wetland may require a state and/or federal permit). Contact the Maine Department of Environmental Protection at 287-2111 and the Army Corps of Engineers at 623-8367 if you have any questions.
3. The use of a garbage grinder on a septic system is not recommended. Depending on use patterns, they can contribute a significant amount of particulate matter and grease to the system. Excessive use may result in premature failure. If a garbage grinder is to be used, additional septic tank capacity, a multi compartment septic tank is required, and/or more frequent septic tank pumping is recommended.
4. For new construction, it is recommended that the septic system owner install low volume toilets (1 1/2 gallons per flush or less) and other flow reducing fixtures such as low volume shower heads and faucets to minimize water consumption. A reduction in water usage will generally result in extended life of your septic system.
5. It is the septic system owner's responsibility to limit water consumption and wastewater generation so that the septic system design capacity (design flow on the HHE-200 form) is not exceeded on any day. Activities which generate large amounts of wastewater should be spread out over several days where possible. Excessive use of a septic system on any day can cause the system to fail even though your use, averaged over a week or month, is below design volume.
6. Do not connect floor or roof drains to a septic system. Your septic system is not designed to handle this water and it will likely cause premature failure.
7. Do not dispose of backwash from water softeners or water treatment devices in your septic system. Large amounts of water can be generated from these devices which can overload a septic system.
8. Do not dispose of any hazardous or toxic substances in a septic system such as paint thinner, paints, varnishes, photographic solutions, pesticides, insecticides, organic solvents or degreasers and drain openers. Septic systems depend on living organisms to function properly. Toxic or hazardous material can, in effect, "kill" the system and are a threat to pollution of surface or groundwater resources. Instead of using a commercial degreaser or drain opener, which can be toxic, use one of the following:
  - A. A plunger or mechanical snake; or
  - B. Pour one handful of baking soda and 1/2 cup of white vinegar down the drainpipe and cover tightly for one minute. Repeat as necessary; or

- C. Pour 1/2 cup salt and 1/2 cup baking soda ~~down~~ the drain followed by 6 cups of boiling water. Let sit for several hours or overnight, then flush with water.
9. Do not dispose of any inert or non-biodegradable substances into your septic system such as disposable diapers, cat box litter, coffee grounds, cigarette filters, sanitary napkins, facial tissues and wet strength paper towels.
10. ~~Do not dispose of large quantities of fats or grease into your septic system unless an external grease trap has been designed for that purpose. Generally, an internal grease trap is inadequate to handle excessive amounts of grease or fat.~~
11. Do not add any septic tank cleaner or additive to your septic system to improve its function or prolong its useful operating life (this includes yeast, horse manure or commercial products). No effective product or material is recognized by State authorities and, in fact, some of these products can actually cause your septic system to fail.
12. Maintain your septic system by regularly having the septic tank pumped. Some biological breakdown of solids and grease occurs in septic tanks but the rate of accumulation virtually always exceeds the rate of biologic breakdown. If your septic tank is not pumped out often enough, solids and greases may build up to the point where they enter your disposal areas. Once this material reaches the disposal area, it will clog the soil surface and likely cause premature failure.
13. We recommend having your septic tank pumped or inspected after one year of use. The pumper can advise you of how often you need to have the septic tank pumped based on what he finds at this inspection (typically a septic tank will need to be pumped every two to five years). Keep in mind that you will need to adjust pumping frequency to coincide with changes in the way you use your system. The more your septic system is used, the more frequently that the septic tank should be pumped.
14. Do not drive over or store heavy materials on any part of your septic system unless it is specifically designed to handle heavy loads. Otherwise, crushed components may be the result and the system may fail.
15. Divert all surface water away from the septic tank and disposal area. Roof areas which contribute runoff water to the septic system site should have gutters installed to divert that water to another location.
16. PLEASE – If you have any questions about your septic system or how to use it, call me (848-5714) and ask for advice. You can also call the State Agency responsible for regulating septic systems, the plumbing program in the Division of Health Engineering, at 287-5689.